



GE Nuclear Energy

J. E. Quinn, Projects Manager
LMR and SBWR Programs

General Electric Company
175 Curtner Avenue, M/C 165 San Jose, CA 95125-1014
408 925-1005 (phone) 408 925-3991 (facsimile)

February 12, 1996

MFN 008-96
Docket 52-004

Document Control Desk
U. S. Nuclear Regulatory Commission
Washington DC 20555

Attention: Theodore E. Quay, Director
Standardization Project Directorate

Subject: **TRANSMITTAL OF GE PROPRIETARY LICENSING
TOPICAL REPORT NEDE-32176P, "TRACG Model Description",
Revision 1, dated February 1996.**

Reference: 1. GE LTR NEDE-32176P, "TRACG Model Description" Rev. 0, dated February 1993.
2. GE LTR NEDC-32391P, Revision B, SBWR Test Analysis Program Description (Proprietary), dated April 13, 1995.
3. NRC Letter, Progress Report on Staff's Review of GE LTR NEDE-32176P, Revision 0, "TRACG Model Description" (TAC No. M85913), dated October 3, 1995
4. GE Letter MFN 019-95, Approach to Achieve Closure of Items Related to the GE SBWR TAPD, dated February 14, 1995.

This letter transmits Revision 1 to the Reference 1 GE Proprietary Licensing Topical Report (LTR) NEDE-32176P, "TRACG Model Description", dated February 1996, for your review and approval. The Non-Proprietary version of this report will be submitted by GE letter MFN 009-96. Specifically, by April 30, 1996, we would like NRC concurrence that we have satisfactorily responded to the open issues identified by the NRC/ACRS as appropriate for resolution in the TRACG Model LTR and as originally listed in Ref. 4; we would also like NRC concurrence that this LTR meets the requirements for a Model and Correlation Report as stated in NUREG 1230. Finally, we would like NRC approval of this LTR for design and safety analyses.

Attachment 1 to this letter shows where in Revision 1 to LTR NEDE-32176P the relevant items from Reference 2 (Att. 2) and Reference 3 are dispositioned. Thus, we believe all open issues relevant to the TRACG Model LTR have been fully addressed, and seek NRC concurrence on this.

Please note that this LTR contains information of the type which the General Electric Company (GE) maintains in confidence and withholds from public disclosure. The information has been handled and classified as proprietary to GE as indicated in the attached affidavit. We hereby

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Change: NRC PDC

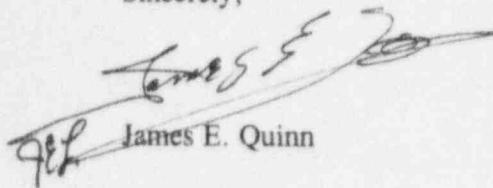
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GE Nuclear Energy

Should you have any questions concerning the Subject document, please contact Bharat Shiralkar of our staff on (408)925-6889.

Sincerely,



James E. Quinn

Attachment: GE TRACG Model LTR Open Items from MFN 046-95.

cc:	P. A. Boehnert	(NRC/ACRS)	(7 paper copies plus E-Mail w/o att.)
	I. Catton	(ACRS)	(1 paper copy plus E-Mail w/o att.)
	S. Q. Ninh	(NRC)	(20 paper copies plus E-Mail w/o att.)
	J. H. Wilson	(NRC)	(1 paper copy. plus E-Mail w/o att.)
	D. Scaletti	(NRC)	(1 paper copy. plus E-Mail w/o att.)



MFN 008-96-95

bcc: (1 paper copy plus E-Mail w/o att.except as noted)

J.G.M. Andersen

R. H. Buchholz

Y. K. Cheung

T. Cook (DOE) (2 paper copies plus E-Mail w/o att.)

S. P. Congdon

G. E. Dix

R. T. Fernandez (EPRI)

J. R. Fitch

J. N. Fox

R. E. Gamble

D. A. Hamon

H. T. Kim

L. A. Klebanov

J. E. Leatherman

J. E. Quinn

T. J. Mulford (EPRI) (2 paper copies plus E-Mail w/o att.)

J. L. Rash

R. J. Reda

F. A. Ross (DOE)

J. Shaug

B. Shiralkar

C. W. Smith

G. L. Sozzi

R. Srinivasan (EPRI)

J. E. Torbeck

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Attachment to MFN 008-96
GE TRACG Model LTR Open Items from MFN 046-95

No.	Item Description	Addressed in NEDE-32176P Rev 1 Section
3	Document TRACG time step determination logic. (Part of Item 53)	8.2.4
6	Develop figure of SBWR/SBWR nodalization similar to Figure 2.1 of NEDE-32178 for reactor vessel and containment	7.11
7	Derivation of TRACG conservation equations w/ assumptions. (Part of Item 53)	3.1
8	Details of assumptions and range of applicability for correlations in TRACG (Part of Item 53)	6, all
11	Comparison of TRACG decay heat model (used in transients in conjunction with neutronics model) vs. ANS standard (1979)	9.3
29	Quantification of correlation uncertainties. Quantify uncertainties in the correlations used in TRACG with reference to application to SBWR. (Included in Item 53)	6, all (Application to SBWR to be addressed in the TRACG Application LTR)
51	Justification of UCB correlation for Hydrogen. Define appropriate correlation to use for condensation in the presence of Hydrogen.	6.6.11
53	Models and Correlations Report- Technical content. Modify TRACG Model LTR (32176) to include Items 3, 6, 7, 8, 11 and 29.	1.3
54	Models and Correlations Report- Production	Completed with this submittal
3.1)	Description of the models and correlations as coded	6, all
3.2)	Basis of Models and Correlations	6, all
3.3)	Critical Assessment of models and correlations for intended applications	6, all
3.4)	Description of containment models and correlations	7.11
3.6)	Discussion on time step control algorithms	8.2.4
3.7)	BOP modeling capability	NA

Attachment to MFN 008-96
GE TRACG Model LTR Open Items from MFN 046-95

No.	Item Description	Addressed in NEDE-32176P Rev 1 Section
3.8)	Mixing model assessments	TRACG Qualification for SBWR LTR
3.9)	Validation of upper plenum & steam dryer	Present TRACG Qualification LTR NEDE-32177P, Rev. 1
3.10)	Assessments for boron transport and mixing	TRACG Qualification for SBWR LTR
3.11)	Accuracy assessments of thermodynamic and material properties	Appendices A&B
3.12)	Assessment of One-group 3D kinetics model for transients	Present TRACG Qualification LTR NEDE-32177P, Rev. 1

#3-54 from Ref. 2, Att 2.

#3.1) – 3.12) from Ref. 3

General Electric Company

AFFIDAVIT

I, Joseph F. Quirk, being duly sworn, depose and state as follows:

- (1) I am Joseph F. Quirk, Project Manager, ABWR Certification, General Electric Company ("GE") and have been delegated the function of reviewing the information described in paragraph (2) which is sought to be withheld, and have been authorized to apply for its withholding.
- (2) GE is an owner of the information sought to be withheld. This information is contained in the GE proprietary Licensing Topical Report NEDE-32176P Revision 1, "TRACG Model Description", dated February 1996. Proprietary information is delineated by bars marked in the right-hand margin adjacent to the specific material.
- (3) In making this application for withholding of proprietary information, GE relies upon the exemption from disclosure set forth in the Freedom of Information Act ("FOIA"), 5 USC Sec. 552(b)(4), and the Trade Secrets Act, 18 USC Sec. 1905, and NRC regulations 10 CFR 9.17(a)(4), 2.790(a)(4), and 2.790(d)(1) for "trade secrets and commercial or financial information obtained from a person and privileged or confidential" (Exemption 4). The material for which exemption from disclosure is here sought is all "confidential commercial information", and some portions also qualify under the narrower definition of "trade secret", within the meanings assigned to those terms for purposes of FOIA Exemption 4 in, respectively, Critical Mass Energy Project v. Nuclear Regulatory Commission, 975F2d871 (DC Cir. 1992), and Public Citizen Health Research Group v. FDA, 704F2d1280 (DC Cir. 1983).
- (4) Some examples of categories of information which fit into the definition of proprietary information are:
 - a. Information that discloses a process, method, or apparatus, including supporting data and analyses, where prevention of its use by GE's competitors without license from GE constitutes a competitive economic advantage over other companies;
 - b. Information which, if used by a competitor, would reduce his expenditure of resources or improve his competitive position in the design, manufacture, shipment, installation, assurance of quality, or licensing of a similar product;
 - c. Information which reveals cost or price information, production capacities, budget levels, or commercial strategies of GE, its customers, or its suppliers;
 - d. Information which reveals aspects of past, present, or future GE customer-funded development plans and programs, of potential commercial value to GE;

- e. Information which discloses patentable subject matter for which it may be desirable to obtain patent protection.

The information sought to be withheld is considered to be proprietary for the reasons set forth in both paragraphs (4)a., (4)b. and (4)d., above.

- (5) The information sought to be withheld is being submitted to NRC in confidence. The information is of a sort customarily held in confidence by GE and its associates, and is in fact so held. The information sought to be withheld has, to the best of my knowledge and belief, consistently been held in confidence by GE and its associates, no public disclosure has been made, and it is not available in public sources. All disclosures to third parties including any required transmittals to NRC, have been made, or must be made, pursuant to regulatory provisions or proprietary agreements which provide for maintenance of the information in confidence. Its initial designation as proprietary information, and the subsequent steps taken to prevent its unauthorized disclosure, are as set forth in paragraphs (6) and (7) following.
- (6) Initial approval of proprietary treatment of a document is made by the manager of the component to whom the work was provided, the person most likely to be acquainted with the value and sensitivity of the information in relation to industry knowledge. Access to such documents within GE is limited on a "need to know" basis.
- (7) The procedure for approval of external release of such a document typically requires review by the staff manager, project manager, principal scientist or other equivalent authority, by the manager of the cognizant marketing function (or his delegate), and by the Legal Operation, for technical content, competitive effect, and determination of the accuracy of the proprietary designation. Disclosures outside GE are limited to regulatory bodies, customers, and potential customers, and their agents, suppliers, and licensees, and others with a legitimate need for the information, and then only in accordance with appropriate regulatory provisions or proprietary agreements.
- (8) The information identified in paragraph (2), above, is classified as proprietary because it contains detailed results of analytical models, methods and processes, including computer codes which would provide other parties, including competitors, with information related to GE (*fuel designs, analysis results and potential commercial offerings for the SBWR plant design*), which were developed at a considerable expense to GE and its associates.

The development of the evaluation process along with the interpretation and application of the analytical results is derived from the extensive experience database that constitutes a major asset to GE and its associates.

- (9) Public disclosure of the information sought to be withheld is likely to cause substantial harm to GE's competitive position and foreclose or reduce the availability of profit-

making opportunities. The information is part of GE's comprehensive BWR technology base, and its commercial value extends beyond the original development cost. The value of the technology base goes beyond the extensive physical database and analytical methodology and includes development of the expertise to determine and apply the appropriate evaluation process.

The research, development, engineering, and analytical costs comprise a substantial investment of time and money by GE and its associates.

The precise value of the expertise to devise testing and an evaluation process, and apply the correct analytical methodology is difficult to quantify, but it clearly is substantial.

GE's competitive advantage will be lost if its competitors are able to use the results of the GE experience to normalize or verify their own process or if they are able to claim an equivalent understanding by demonstrating that they can arrive at the same or similar conclusions.

The value of this information to GE would be lost if the information were disclosed to the public. Making such information available to competitors without their having been required to undertake a similar expenditure of resources would unfairly provide competitors with a windfall, and deprive GE of the opportunity to exercise its competitive advantage to seek an adequate return on its large investment in developing these very valuable analytical tools.

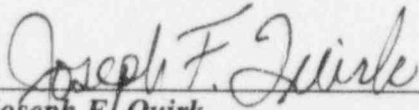
STATE OF CALIFORNIA)
)
COUNTY OF SANTA CLARA)

ss:

Joseph F. Quirk, being duly sworn, deposes and says:

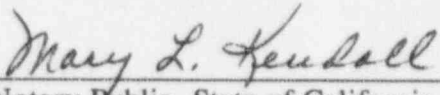
That he has read the foregoing affidavit and the matters stated therein are true and correct to the best of his knowledge, information, and belief.

Executed at San Jose, California, this 21st day of February 1996.



Joseph F. Quirk
General Electric Company

Subscribed and sworn before me this 21st day of February 1996.



Notary Public, State of California

